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Page 2, line 3-14,

One driver aid system currently available, in the Cadillac DeVille, military "Night Vision" is adapted to detect objects in front of the automobile at night. Heat in the form of high emission of infrared radiation from humans, other animals and cars in front of the car is captured using cameras (focusing optics) and focused on an infrared detector. The detected infrared radiation data is transferred to processing electronics and used to form a monochromatic image of the object. The image of the object is projected by a head-up display near the front edge of the hood in the driver's peripheral vision. At night, objects that may be outside the range of the automobiles headlights may thus be detected in advance and projected via the heads-up display. The system is described in more detail in the document "DeVille Becomes First Car To Offer Safety Benefits Of Night Vision" at ~~http://www.gm.com/company/gmability/safety/crash_avoidance/newfeatures/night_vision.html~~a copy of which is in the filewrapper.

p. 3, lines 5-13

A method of detecting pedestrians and traffic signs and then informing the driver of certain potential hazards (a collision with a pedestrian, speeding, or turning the wrong way down a one-way street) is described in "Real-Time Object Detection For "Smart" Vehicles" by D.M. Gavrila and V. Philomin, Proceedings of IEEE International Conference On Computer Vision,

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Kerkyra, Greece 1999 ~~(available at www.gavrila.net)~~, the contents of which are hereby incorporated by reference herein. A template hierarchy captures a variety of object shapes, and matching is achieved using a variant of Distance Transform based-matching, that uses a simultaneous coarse-to-fine approach over the shape hierarchy and over the transformation parameters.

p. 8, lines 10-20

Control unit 20 is programmed with processing software that improves images received from camera 12 that is obscured due to weather conditions, such as that shown in Fig. 3b. The processing software first treats the snowflakes 26 in the image as "salt and pepper" noise. Salt and pepper noise is alternatively referred to as "data drop-out" noise or "speckle". Salt and pepper noise often results from faulty transmission of image data, which randomly creates corrupted pixels throughout the image. The corrupted pixels may have a maximum value (which looks like snow in the image), or may be alternatively set to either zero or the maximum value (thus giving the name "salt and pepper"). Uncorrupted pixels in the image retain their original image data. However, the corrupted pixels contain no information about their original values. Additional description of salt and pepper noise is given at ~~http://www.dai.ed.ac.uk/HIPR2/noise.htm.~~ R. Fisher , et al., "Histogram Equalization", Hyper media image Processing Reference 2, Department of Artificial Intelligence, University of Edinburgh (2000), a copy of which is in the filewrapper.

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Page 12, line 23 through page 13, line 11

An alternative histogram equalization operation that is particularly suited for digital implementations uses the transformation function:

$$f(D_A) = \max(0, \text{round}[D_M * n_k/N^2)] - 1) \quad \text{Eq. 3}$$

where N is the number of image pixels, and n_k is the number of pixels at intensity level k (=D_A) or less. All pixels in the input image having intensity level D_A (or k) are mapped to the intensity level $f(D_A)$. While the output image is not necessarily fully equalized (there may be holes or unused intensity levels in the histogram), the intensity density of the pixels of the original image are spread more equally over the output image, especially if the number of pixels and the intensity quantization level of the input image is high. Histogram equalization as summarized above is described in more detail in the publication "Histogram Equalization", R. Fisher, et al., Hypermedia Image Processing Reference 2, Department of Artificial Intelligence, University of Edinburgh (2000), ~~published at www.dai.ed.ac.uk/HIPR2/histeq.htm~~ a copy of which is in the filewapper, the contents of which are hereby incorporated by reference herein.